Abstract

The present invention filters runoff water containing oil and an emulsion of oil and water. A tank receives the inlet water and feeds it to a reservoir which in turn feeds the water to the cylindrical filter cells. The water passing through the filter cells is received by a manifold which feeds the clean water to an outlet. However, when the runoff water has a high rate of flow the reservoir soon overflows and the excess water flows directly to an outlet. The reservoir may be either above or below the filter cells. If above, the water entering the inlet flows downward to a reservoir which is perforated to provide water to the filter cells. If, however, the reservoir is below the filter cells it has a perforated top which feeds the filter cells. The water in the reservoir is under pressure. The filter cells may be cylindrical. They have an inner vertical cylindrical passageway surrounded by one or more cylindrical layers. One filtering media is in said inner passageway. Each cylindrical layer provides a different filtering media. In one form of the invention the filtering media in the inner passageway is a coarse media and the filtering media in the other cylindrical layer or layers is a finer media. Each layer of the filter bounded by a porous barrier. Surrounding, and spaced from, the outermost barrier is an outer wall. The space between the outermost barrier and the wall forms a drain for feeding the filtered liquid to an output.